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**Economic Intelligence Report**

**HOUSING CONSTRUCTION IN NORTH KOREA  
SINCE THE KOREAN WAR  
1953-61**



CIA/RR ER 62-21

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**CENTRAL INTELLIGENCE AGENCY**  
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HOUSING CONSTRUCTION IN NORTH KOREA SINCE THE KOREAN WAR\*  
1953-61

Summary and Conclusions

At the end of the Korean War in July 1953, about 28 million square meters (sq m) of housing had been destroyed in North Korea. These losses were the equivalent of 600,000 houses, or about 35 percent of the housing that had been available in 1949. Since 1953, nearly all of this floorspace has been repaired or replaced, but during 1949-61 the population increased by about 1.5 million, so that the amount of floorspace per capita is still below the prewar level. In addition, much of this housing is old and in poor repair, and much was originally intended to be temporary. Nevertheless, the average floorspace per capita in North Korea amounts to about 6 to 7 sq m, a level of housing considerably above that in any other country in Communist Asia\*\*; and even though construction plans generally have not been fulfilled, the postwar reconstruction of housing has proceeded much more rapidly in North Korea than in South Korea.

Of the 27 million sq m of housing constructed or repaired since 1953, slightly more than half were in urban and industrial areas. During 1949-61, however, the urban population increased from 1.4 million to 4.8 million. As a consequence, living quarters in the cities are still crowded, and many people probably are living in substandard housing that has not been renovated since the war. To alleviate this situation, the regime has elected to increase the construction of standardized apartment buildings, many of prefabricated concrete, as the quickest and least expensive solution to the housing problem. The individual apartments usually consist of one or two rooms, a kitchen, and sometimes a toilet and a storage room. Most of the apartment buildings reportedly have electricity, but many have no running water, very few have elevators or central heating, and many are poorly constructed.

Until recently the central government had allocated practically no state funds or modern construction materials to housing outside the cities. Nevertheless, about 13 million sq m of housing have been constructed in rural areas since the end of the war, almost entirely with

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\* The estimates and conclusions in this report represent the best judgment of this Office as of 1 May 1962.

\*\* For the purposes of this report, Communist Asia includes Communist China, North Vietnam, and North Korea but not Outer Mongolia.

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cooperative and private capital and with construction materials that are procured locally. Some of the rural dwellings are modern by Asian standards, with lime-coated walls and cement-tiled roofs, and contain two hot-floor rooms, a storage area, and a kitchen. Most farm dwellings in the lowlands, however, are still primitive, constructed with local materials such as stones, mud, sorghum stalks, and rice-straw or bark thatch. In the forested areas of the northern interior, wood construction is typical.

The importance that the central government attaches to the housing program is reflected in the large proportion of the total state investment\* allocated to housing: during 1954-60 this amount was second only to that devoted to heavy industry. Since 1954, between 10 and 15 percent of the total state investment has been allocated to housing, a proportion lower than the current Soviet average of 18 to 20 percent but higher than the 7 to 9 percent allocated in Communist China and North Vietnam. Under the Seven Year Plan (1961-67) the proportion in North Korea is expected to drop to about 8 percent, but the total amount of state investment planned for housing during 1961-67 is considerably higher than that allocated during 1953-60. If construction costs remain stable, or decline, therefore, additions to housing should increase faster than they have since the war.

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\* In official North Korean publications, this category is described as State Capital Construction Investment.

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## I. Aggregate Housing Construction, 1953-61

During the Korean War a large part of the housing in North Korea was destroyed. After the war ended in July 1953, the regime estimated that 28 million sq m of housing had been destroyed 1/<sup>\*</sup> -- the equivalent of 600,000 houses, or approximately 35 percent of the housing that had been available in North Korea in 1949. The consequent shortage of housing forced a large part of the population to use makeshift shelters for protection against the harsh Korean climate, but conditions would have been even worse during the early postwar years if housing space had not been left vacant by 2 million or more people who either fled south or were killed during the war.

### A. Claimed Achievements

The North Koreans claim to have made substantial progress since the end of the Korean War in reconstructing and modernizing their housing. By the end of 1961, according to official statements, about 27 million sq m of housing had been repaired or newly constructed, 2/<sup>\*</sup> an amount almost equal to that destroyed during the Korean War. As shown in Table 1,<sup>\*\*</sup> 13.4 million sq m were alleged to have been built by the end of the Three Year Plan (1954-56) and about 13.9 million sq m during the original Five Year Plan (1957-61).<sup>\*\*\*</sup> This volume of construction has kept pace with the increase in population since 1953, and, as shown in Table 2,<sup>†</sup> North Korea currently claims a per capita floorspace of more than 6 sq m, the highest in Communist Asia.<sup>††</sup> This claimed performance, however, should be put in perspective.

<sup>\*\*</sup> Table 1 follows on p. 4.

<sup>\*\*\*</sup> North Korea has had three postwar plans: the Three Year Plan (1954-56), the Five Year Plan (1957-61), and the current Seven Year Plan (1961-67). Because the Five Year Plan was officially ended in 1960, 1 year early, it did not overlap with the current Seven Year Plan.

<sup>†</sup> Table 2 follows on p. 5.

<sup>††</sup> The average per capita floorspace in 1960 in Communist China was about 4.0 sq m, as shown in Table 2. The average per capita floorspace in North Vietnam is not definitely known, but, based on the amount of housing constructed in that country during 1955-59 (690,000 sq m) 3/<sup>\*</sup> and the small amount of investment allocated to housing, the above statement is considered valid.

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Table 1  
Housing Constructed in North Korea a/  
1953-61

Million Square Meters			
<u>Year</u>	<u>Total</u>	<u>Urban Areas</u>	<u>Rural Areas</u>
1953 <u>b/</u>	3.122	1.381	1.741
1954	4.279	2.182	2.097
1955	2.932	1.399	1.533
1956	3.067	1.138	1.929
Total 1953-56	<u>13.400</u>	<u>6.100</u>	<u>7.300</u>
1957	2.946	1.259	1.687
1958	3.311	1.980	1.331
1959	2.337	1.303	1.034
1960	2.687	1.675	1.012
1961	2.630	1.830	0.800
Total 1957-61	<u>13.911</u>	<u>8.047</u>	<u>5.864</u>
Grand total	<u>27.311</u>	<u>14.147</u>	<u>13.164</u>

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b. Second half of 1953.

#### B. Other Considerations

By the end of 1961 the population of North Korea was estimated to be 11.1 million\* compared with about 9.6 million just before the Korean War. The population has increased by about 1.5 million, but housing floorspace has not yet regained its prewar level, indicating that the current average per capita floorspace is less than that before the war. Direct comparisons of floorspace, however, are not completely valid. During the past 10 years the distribution of population has shifted from the rural to the urban areas, so that the percentage of the population living on farms dropped from 85 percent in 1949 to about 55 to 60 percent in 1961. Traditionally the per capita floorspace in

\* Because North Korea has never taken a national census, all population figures in this report are estimated and should be considered to have some degree of error.

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Table 2

Estimated Population, Total Floorspace,  
and Average Per Capita Floorspace in North Korea  
and Estimated Per Capita Floorspace in Communist China  
1953-61

Year	North Korea			Communist China
	Population (Midyear in Millions)	Total Floorspace <u>a</u> / (Million Square Meters)	Average Per Capita Floorspace <u>b</u> / (Square Meters)	Average Per Capita Floorspace <u>c</u> / (Square Meters)
1953 <u>d</u> /	8.6	48.743	5.7	
1953	8.7	51.865	6.0	4.58
1954	8.9	56.144	6.3	4.52
1955	9.2	59.079	6.4	4.47
1956	9.5	62.143	6.5	4.44
1957	9.8	65.089	6.6	4.41
1958	10.1	68.400	6.8	4.41
1959	10.4	70.737	6 to 7	4.42
1960	10.8	73.424	6 to 7	4.0
1961	11.1	76.054	6 to 7	4.0

a. The total floorspace for 1959 through 1961 would actually be slightly lower than shown above, for some housing undoubtedly was retired during this period. A lack of data, however, precludes an adjustment for this factor.

b. In 1958 the average per capita floorspace in the urban areas was claimed to be about 5.4 sq m and that in the rural areas about 7.5 sq m. 8/ Data in these columns are calculated from these base figures and from the data on floorspace in Table 1.

d. First data for 1953 are midyear figures.

the rural areas has been higher than in the urban areas because space is needed for stores, tools, animals, and the like. Now that there are proportionally fewer farm dwellings, the amount of habitable floorspace may be closer to the prewar level than the data suggest.

Differences in quality also make comparisons difficult. The permanent housing constructed since the war is of higher quality in

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some respects than that of prewar years, in that electricity, sewage systems, piped water, and other amenities are more prevalent. Temporary dwellings, however, constituted the greater part of the 13.4 million sq m of housing constructed during 1953-56, and this amount of construction also included minimal repairs to damaged buildings. The country suffered from an acute shortage of building materials and other capital to construct and finance new housing during the early postwar years, and it was not until 1956 or 1957 that significant amounts of permanent housing were being constructed. Of the housing claimed to have been built during 1953-56, therefore, a large proportion can be considered to be makeshift dwellings that may have deteriorated into slums.\*

Entirely apart from these uncertain comparisons, however, it may be inferred from the goals for housing construction that the regime considers housing to be inadequate in North Korea. The Five Year Plan (1957-61) was officially announced to have been completed in 4 years (1957-60) because "most major targets had been reached," but the target for the construction of new housing had not been reached. The Five Year Plan originally called for construction of 19 million sq m of housing, financed both privately and by the state, to "basically solve the housing shortage," 10/ but only 13.9 million sq m were completed through 1961 -- an underfulfillment of about 30 percent. Moreover, the regime implies from target figures for the current Seven Year Plan (1961-67) that many dwelling units are now superannuated. The goal is to build housing for 1.2 million households by 1967 so that an additional "48 percent of the population will have new houses in only 7 years."\*\* 11/

## II. Urban Housing

Of a total of more than 27 million sq m of housing claimed to have been constructed or repaired through 1961, about 14 million sq m have been built in the urban areas and at industrial sites, as shown in Table 2.\*\*\* In 1958 the regime claimed that the average per capita floorspace for housing in the urban areas was about 5.4 sq m. On the assumption that this figure has not greatly changed, construction of 14 million sq m of housing would have provided shelter for more than 2.5 million people.

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\* With constant maintenance, some of these dwellings could be habitable for a long period of time, but little is known about the amount or cost of maintenance of housing in North Korea.

\*\* Past performance in housing construction and anticipated accomplishments in the future are important propaganda themes used by North Korea, particularly in propaganda directed toward South Korea.

\*\*\* P. 5, above.

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To determine whether or not housing conditions in the cities have actually improved, however, the volume of construction should be weighed against the growth of the urban population. It is estimated that during 1949-61 the urban population increased from about 1.4 million to about 4.8 million. The 14 million sq m of urban housing constructed since the Korean War would just about cover this increase in the urban population during the past 11 years, but there would be no residue of new housing to compensate for the extensive damage that was inflicted in the cities during the war. It follows that many people in the cities probably are still living in substandard housing which has not been reconstructed since the war. Whatever the case, it is certain that living quarters in the cities are still crowded and that the quality of much of the housing is still very low by Western standards.

P'yongyang, the capital city of North Korea, has received an important share of total housing built in the urban areas. With about 15 percent of the total urban population, P'yongyang has received approximately 30 percent of postwar urban housing.\* The city was heavily damaged during the war, and the regime is rebuilding it into the showplace of the country by constructing impressive municipal buildings and modern dwelling units, as shown in Figures 1 and 2.\*\* P'yongyang has received the most modern apartment houses in the country -- apartment houses with some of the amenities enjoyed in the West. Other major cities such as Hamhung, Kaesong, Ch'ongjin, and Sunchon also have apartment houses, but, unlike some of those in P'yongyang, many of these do not have flush toilets, basements, or inside running water.

#### A. Multistoried Dwellings

In the rural areas, individual family dwellings still predominate, but in the cities and to a lesser extent at industrial sites the trend is toward multistoried apartment houses, as shown in Figures 3 and 4.\*\*\* Undoubtedly the most important postwar housing development has been the construction of apartment houses. Many North Korean apartments are similar to barracks in both appearance and facilities offered, but such dwellings are considered by the regime to be the most rapid and most economical way to house the burgeoning urban population.

Generally, individual units in an apartment house contain one or two rooms, a kitchen, and, on occasion, a toilet and a storage room.†

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\* The population of P'yongyang is estimated to be between 600,000 and 800,000, and the city had received about 3.4 million sq m of repaired and newly constructed housing by the end of 1959. 12/

\*\* Figures 1 and 2 follow on p. 8.

\*\*\* Figures 3 and 4 follow on p. 9.

† Text continued on p. 10.

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Figure 1. P'yongyang: War Damage, 1953



Figure 2. P'yongyang: Postwar Reconstruction, 1958

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Figure 3. Sunchon: Apartment Houses, 1958



Figure 4. Hamhung: Workers' Apartments, 1958

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Few, if any, have an elevator or central heating, although some have inside running water and many have electricity. The quality of construction of North Korean apartments tends to be considerably below Western standards. As a general rule, the closer an apartment is to P'yongyang, the capital city, the better the quality of construction. Numerous reports allude to low-quality construction in cities other than P'yongyang. There have been cases in which newly built apartments had cracks in the walls and floors and others in which the walls were out of plumb and the floors sagged. In 1958, for example, one apartment house for employees of the Namp'o Glass Factory had floor panels that were severely cracked and were supported only by iron reinforcing bars, while another inclined at a 10-degree angle because of weak foundations and was unsafe for occupancy. 13/

When an apartment house is completed, it is handed over for final inspection to the People's Committee in the area concerned. The People's Committee, in turn, allocates it to a ministry for distribution to subordinate agencies. If Party hacks and other privileged individuals are already adequately housed, men with families of three or more are usually given first preference in the final allocation. 14/

Regardless of the amenities offered or the quality of construction, tenants appear anxious to occupy apartments built by the state, sometimes even before they are actually completed. Compelling reasons for this attitude are that dwellings built by the state are reported to be tax free, in addition to being a distinct improvement over the substandard housing that was endemic to the North Korean scene following the Korean War.

B. Prefabricated Housing

Although brick is still the most important wall material used in construction in North Korea, the use of prefabricated parts is increasing in importance. This is a technique that is widely heralded in the USSR as being the most expeditious method of providing a growing urban population with adequate housing. Large reinforced concrete blocks or panels are precast in factories in standardized shapes and sizes and then put in place at the construction site. The advantages of prefabricated construction are that it standardizes the design and quality of construction, increases the speed of construction, permits year-round construction, and saves on the use of labor, and it is alleged to require less material and to be less expensive than conventional methods.\* Partly counterbalancing the advantages, certain

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\* In building an apartment house with prefabricated parts, the following technique was reported to have been used in 1958 when the prefabrication program was just getting started. [footnote continued on p. 11]

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disadvantages are inherent in this method of construction. A large pool of cranes and other transportation facilities must be available to move the heavy precast concrete panels; damage is rather high in transit; and, to the aesthetically inclined, standardized prefabrication on a large scale presents a rather monotonous and unattractive appearance.

Construction of apartment houses using prefabricated components did not begin until late in 1957 or early in 1958 and has been limited to P'yongyang (see Figure 5\*) and other large cities. The regime appears to be sold on the system, but it is actually too early to determine whether or not the prefabrication program will provide the full measure of economic benefits claimed by the North Koreans. The USSR has encountered technical and programing problems in implementing some aspects of its program, and the North Koreans may have encountered similar problems. Not enough data are available for a thorough analysis of the North Korean program. Nevertheless, periodic official statements of accomplishments in the field of prefabrication and a drastic cutback in production of brick, 16/ a traditional wall material, are indicative of the trend of thinking of the planners and the importance that they place on the method.\*\*

C. Single-Story Housing

Although apartment houses are increasing in importance, single-story dwelling units are still predominant throughout the country. They are particularly prominent at industrial sites and in the rural areas, as shown in Figures 6 and 7.\*\*\* At many industrial sites a<sup>†</sup>

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Foundation trenches 1 meter wide and 1.5 meters deep were first dug. The trenches were filled with slag and then compacted with a roller. On the trenches were laid foundation blocks that were joined together with cement and iron bars. On these blocks were set the wall panels, on which the panels for the floors were placed. To complete the foundation work, a crew of 20 workers aided by the use of a crane, two belt conveyors, and five wheelbarrows required less than 1 month. With a crane a crew of five laborers took an average of 5 minutes to hoist up and lay a panel and 30 to 60 minutes to assemble an entire room. Although it was alleged that a prefabricated apartment house for 100 families could be completed in 2 or 3 months, the shoddy foundation work mentioned above is mainly responsible for tilting apartment houses and settlement cracks in walls and floors. 15/

\* Figure 5 follows on p. 12.

\*\* For example, the regime claims that, in 1960, 42.8 percent of the new buildings were constructed with prefabricated materials (20 percent of all industrial buildings and 60 percent of all residential buildings). 17/

\*\*\* Figures 6 and 7 follow on p. 13.

† Text continued on p. 14.

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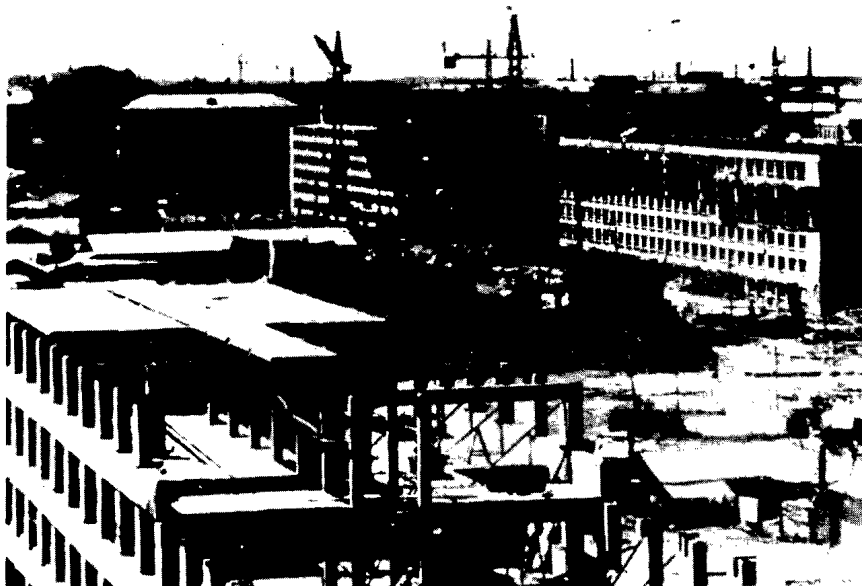


Figure 5. P'yongyang: Construction of Apartment Houses Using  
Prefabricated Parts, 1958

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Figure 6. Modern Farmhouses in a North Korean Cooperative



Figure 7. Housing Under Construction for Workers  
at the Kapsan Copper Mine, 1958

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typical single-story dwelling unit is 10 to 12 meters (m) in length, 4 m in width, and 2.5 m in height, constructed with wood, brick, or mud walls and covered with a roof of cement tile. This type of dwelling, each having one room and a kitchen, is constructed to house two families. A number of families use the same lavatory and the same source of water. Inside plumbing is not prevalent, although electrification appears to be quite widespread.

Housing at the Komdok Mine in South Hamyong Province provides a good example of single-story dwellings in North Korea. In 1959, dwellings for workers were divided into grades A, B, and C, the first totaling 5 houses, the second 800, and the third 500. Grade A residences were constructed before the armistice and contained a bedroom, a kitchen, a bathroom, and a storage area. These dwellings were allotted to the mine manager, the Chairman of the Korean Labor Party organization at the mine, the chief clerk, the deputy manager of supply, and the deputy manager of business. Grade B residences were constructed with white-washed clay walls and roofs of cement tile and consisted of four rooms and two kitchens. Although these dwellings were built before the armistice to house two households, they were occupied by two to four families of clerks and laborers. Grade C houses were postwar temporary buildings with whitewashed clay walls and board roofs, each consisting of two rooms and two kitchens. These units also housed clerks and laborers. Other workers who were not fortunate enough to have one of the above types of dwelling lived in semicave structures that they had built themselves -- except for bachelors, who lived in barracks-like dormitories. 18/

### III. Rural Housing

From 1953 through 1961, as shown in Table 1,\* about 13 million sq m of housing are claimed to have been constructed or rehabilitated in the rural areas. Using the official claim that the average rural per capita floorspace is about 7.5 sq m, this volume of construction would provide shelter for approximately 1.76 million people, or about 25 percent of the present rural population. The high point of rural housing construction was reached in 1954, when 2.1 million sq m were claimed to have been rebuilt, but the pace slowed to an estimated total of 800,000 sq m in 1961. The declining trend in the annual volume of housing construction in the rural areas, however, is consistent with the shift of population from the farms to the cities.

Although the quantity of housing construction has been roughly equal in rural and urban areas, rural housing has played a role secondary to urban housing in North Korean planning and in the allocation of

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\* P. 4, above.

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resources. Rural housing has been constructed almost exclusively with cooperative and private capital and with primitive construction materials that are procured locally -- the exact reverse of urban housing, which has been built with state funds and more modern construction materials allocated by the central government.

The regime has paid a great deal of lip service to the idea of developing the rural areas, but the responsibility has rested largely with the peasants themselves. The original Five Year Plan (1957-61), for example, called for 9 million sq m of new housing to be built with the "peasants' own funds" to solve the housing problem on the farm, 19/ but this goal was too high for the peasants to attain. When the plan was terminated in 1960, only 5 million sq m had been built -- approximately 56 percent of the target. Furthermore, although most of the housing built during the early postwar years was of a temporary nature not intended for permanent habitation, these so-called provisional dwellings are still being used.\*

Some of the rural dwellings built since the war are modern by Asian standards,\*\* with lime-coated walls and cement-tiled roofs and containing two hot-floor rooms, a storage area, and a kitchen. Some reports indicate that even some apartment houses have been built in the rural areas to house members of farm cooperatives. Most farm dwellings, however, are rather primitive, being constructed with local materials such as stones, mud, sorghum stalks, and rice-straw or bark thatch in the lowlands, although wood construction is typical in the more isolated and heavily forested areas of the northern interior.

#### IV. Investment

Information on the amount of the total investment allocated to housing in North Korea is scarce. The regime has released some figures on the amount of investment that the state has allotted to housing, but little information is available on the amount of capital from nonstate sources that has gone into housing. Little can be said, therefore, about the latter, but an analysis of state investment gives a fairly clear picture of the type and cost of housing that the state has chosen to finance in the urban and industrial areas.

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\* Numerous reports allude to the shoddy construction of rural housing. For example, in one report, Premier Kim Il-sung, while inspecting rural areas, complained that builders must eliminate the practice of constructing farm houses in an irresponsible manner, such as building houses without foundations. When he asked the builders why they were doing this, they replied, "Why should these houses which are only temporary dwellings require foundations?" 20/

\*\* See Figure 6, p. 13, above.

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A. State Investment

Since 1954, between 10 and 15 percent of the total state investment has been devoted to housing construction, as illustrated in Table 3.\* This proportion is below the current Soviet allocation of 18 to 20 percent but is higher than the 7 to 9 percent currently allocated in Communist China and North Vietnam. 21/ Moreover, the amount of state investment devoted to housing in North Korea during 1954-60 was second only to that devoted to heavy industry, surpassing such important sectors of the economy as transportation, agriculture, and light industry.

During the immediate postwar years the average cost per square meter of housing built with state investment was extremely low in North Korea in relation to the cost in later years -- 9.3<sup>o</sup> won\*\* per square meter in 1953 and 16.8 won per square meter in 1954, as shown in Table 3. These costs suggest that much of the 13.4 million sq m of housing constructed during the Three Year Plan (1954-56) was in reality construction of low-cost temporary housing and minimal repairs to damaged housing. Late in 1955 and early in 1956 the regime started investing funds in construction of new permanent dwellings. The cost would necessarily increase as new units were built, and, as expected, in 1955 the cost of state-financed housing rose to 21.4 won per square meter and in 1956 to 30.6 won per square meter.

During 1956-60 the cost of state-financed housing remained fairly constant in the range of 26 to 30 won per square meter, except for 1958, when it dropped to 19.6 won per square meter. The reason for the drop in 1958 is not completely clear, but it may be explained as follows. The year 1958 in North Korea was similar in many respects to the 1958 "leap forward" in Communist China, although it was officially known as the "flying horse" movement. The regime claimed that all available manpower and stockpiled building materials were mobilized on the "construction front." In the capital city of P'yongyang, for example, it was claimed that "the contractors erected dwellings for 20,000 households with the materials and funds originally allotted for 7,000 households." 22/ This alleged method of building additional dwellings with a given amount of resources would imply a misrepresentation of the actual cost of construction in 1958 or, more probably, would indicate that a larger quantity of less durable or smaller housing was built with a given amount of materials.

\* Table 3 follows on p. 17.

\*\* Won values in this report are given in new constant won (based on 1 January 1950 prices) and may be converted to US dollars at a rate of exchange of 2.57 won to US \$1. This rate does not necessarily reflect the value of the won in terms of the dollar for the construction industry.

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Table 3

State Investment in Housing Construction in North Korea  
1953-60

Year	State Investment in Housing <u>a/</u> (Million New Won)	State Investment in Housing as a Percentage of Total State Investment (Percent)	Housing Built with State Investment (Million Square Meters)	Average Cost per Square Meter <u>b/</u> (New Won)
1953	7.277 <u>c/</u>	8.1 <u>c/</u>	0.783 <u>d/</u>	9.3
1954	26.250 <u>e/</u>	10.6 <u>e/</u>	1.564 <u>f/</u>	16.8
1955	32.010 <u>e/</u>	10.9 <u>e/</u>	1.494 <u>f/</u>	21.4
1956	38.570 <u>e/</u>	14.6 <u>e/</u>	1.259 <u>f/</u>	30.6
1957	40.600 <u>e/</u>	15.0 <u>e/</u>	1.544 <u>f/</u>	26.3
1958	43.730 <u>e/</u>	12.8 <u>e/</u>	2.235 <u>f/</u>	19.6
1959	52.802 <u>g/</u>	11.3 <u>h/</u>	1.904 <u>i/</u>	27.7
1960	63.900 <u>j/</u>	15.0 <u>j/</u>	2.421 <u>k/</u>	26.4

a. Based on 1 January 1950 prices.

b. Computed by dividing column 1 by column 3.

d. 24/

e. 25/

f. 26/

g. 27/

i. 30/

k. 32/

50X1

50X1

50X1

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In either event, the cost in 1959 and 1960 rose to approximately 27 won per square meter, more closely corresponding to the cost in 1956 and 1957.

B. Investment During the Seven Year Plan (1961-67)

During the current Seven Year Plan (1961-67) the regime plans to invest about 8 percent of state capital investment in housing, or slightly less than the 10 to 15 percent invested since 1954. <sup>33/</sup> This drop in the percentage of investment implies that the priority which housing has enjoyed in the past will diminish somewhat in the future. The total state investment planned for housing during the plan period, however, is actually higher than the total investment in housing during 1953-60.\* Therefore, if the cost per square meter remains constant or declines over the next 6 years, considerably more housing could be built during 1961-67 than was built from 1953 through 1960.

C. Nonstate Investment

Because reliable information about nonstate investment in housing is lacking, only a preliminary analysis of this important source of investment can be attempted. The two main sources of funds for nonstate investment in housing appear to have come from the rural co-operatives and from private savings. During the early years after the Korean War, private investment was the main source of funds for both rural and urban housing. But since 1956, cooperative funds\*\* have been the main source of capital for rural housing and state investment for urban housing. Housing built with private investment is presently quite negligible and is probably limited to a small segment of the population who are in a position to accumulate savings or to obtain loans and building materials from the state.

The importance of nonstate investment (cooperative and private investment) in housing has steadily decreased since 1953, as shown in

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\* During 1953-60 the state invested about 305 million won in housing, and during the current Seven Year Plan approximately 440 million won is planned for investment in housing (in 1 January 1950 prices).

\*\* The cooperatives construct dwellings for their members, and the members repay the cost of construction over a period of years after taking occupancy. One report states that the cost of a rural dwelling is 500 won (in prices that were current in 1959), or about 15 won per square meter. <sup>34/</sup>

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Table 4.\* Part of the declining importance of nonstate investment is due to the shift of population from the farms to the cities, but another important reason is that the farmers have not had the construction materials or financial resources to compete with the urban and industrial areas, where the regime's ideological affinity lies.

Table 4

Ratio of Housing Built with Nonstate Funds  
to the Total Housing Constructed in North Korea  
1953-61

<u>Million Square Meters</u>			
<u>Year</u>	<u>Total Housing Constructed</u>	<u>Housing Built with Nonstate Investment <u>a/</u></u>	<u>Percent</u>
1953	3.122	2.339	75
1954	4.279	2.715	63
1955	2.932	1.438	49
1956	3.067	1.808	59
1957	2.946	1.402	48
1958	3.311	1.076	32
1959	2.337	0.433 <u>b/</u>	19
1960	2.687	0.266 <u>c/</u>	10
1961	2.630	N.A.	N.A.

b. 36/  
c. 37/

50X1

V. A Tentative Comparison with South Korea

North Korea is generally considered to be an underdeveloped country, but it has made progress in dealing with its housing problems since the Korean War. By Western standards the country still suffers from a quantitative and a qualitative shortage of housing, but by Asian standards an opposite conclusion could be drawn. Therefore, to place

\* The sharp drop in nonstate construction in 1959 and 1960 implies that during recent years the central government may be financing more housing construction in the rural areas than during earlier years.

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the North Korean accomplishment in true perspective, a comparison with another underdeveloped Asian country is valuable.

The most logical country to use in a comparison with the North Korean model would appear to be South Korea -- not only because one country is a member of the Communist Bloc and the other a member of the Free World but also because the housing sectors of both countries suffered extensive war damage during the same period. Unfortunately, only a preliminary comparison can be attempted, for the South Korean government does not publish comprehensive housing statistics. The meager statistics that are available, however, illustrate the difference between the two countries in postwar rehabilitation of housing.

Following the Korean War, South Korea, like North Korea, suffered from an acute shortage of housing. Many dwellings had been destroyed during the conflict, and thousands of persons were left homeless. Even before the Korean War the shortage of housing in South Korea had become rather acute because about 1 million repatriates returned to South Korea from Japan between World War II and the outbreak of the Korean War. 38/ The shortage of housing in the south was further intensified during the Korean War, when approximately 1.5 million North Korean refugees fled south. Considering war damage (which rendered about 2.5 million people homeless), the net increase in population, and the number of superannuated houses, it has been estimated that immediately following the war South Korea needed 1 million additional dwelling units 39/ -- approximately 40 million sq m of floorspace -- to house the population.\*

Some effort has been made since the Korean War to improve the housing situation in South Korea, but it has been far from adequate. A number of temporary encampments were erected following the war to house refugees and displaced persons, but these projects were emergency expedients not intended to solve the basic problems of clearing slums and alleviating overcrowded living conditions. Statistics released by the South Korean government imply that the amount of permanent new housing constructed in South Korea has been meager compared with the demand for such housing. This observation is substantiated by the figures in Table 5,\*\* which show the amount of permanent housing that has been newly constructed, reconstructed, and expanded since 1955 in the urban areas of South Korea. These figures suggest that of the estimated 40 million sq m of housing needed after the Korean War, and with a total urban population comparable to that of North Korea, only

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\* Most of this requirement probably was in the urban areas.

\*\* Table 5 follows on p. 21.



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about 2.5 million sq m had been built by the end of 1960. This volume of construction is only about 30 percent of North Korean urban construction and repairs during a comparable period.\*

Table 5

Construction of Urban Housing in South Korea and North Korea  
1955-60

		Square Meters
<u>Year</u>	<u>South Korea <u>a/</u></u>	<u>North Korea</u>
1955	156,000 <u>b/</u>	1,399,000
1956	328,935 <u>c/</u>	1,138,000
1957	263,884 <u>c/</u>	1,259,000
1958	443,151 <u>c/</u>	1,980,000
1959	720,546 <u>c/</u>	1,303,000
1960	636,000 <u>d/</u>	1,675,000
Total	<u>2,548,516</u>	<u>8,754,000</u>

a. Based on construction permits issued.

b. 40/

c. 41/

d. 42/

\* It is estimated that the per capita floorspace of housing in South Korea is somewhere in the range of 4 to 6 sq m.

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